

IN THE CLAIMS

Please amend the claims as follows:

1. (CURRENTLY AMENDED) In a electrochemical cell, a cathode comprising:

a cathode active material including a valency change material for storing and supplying oxygen via a change in the valency state of said valency change material.

2. (CANCELED)

3. (CANCELED)

4. (ORIGINAL) The cathode according to claim 1, wherein said valency change material is a nickel hydroxide/nickel oxyhydroxide redox couple.

5. (CURRENTLY AMENDED) The cathode according to claim 1, wherein said valency change ~~redox~~ material comprises a metal/metal oxide redox couple of an element selected from the group consisting of copper, silver, zinc and cadmium.

6. (CURRENTLY AMENDED) The cathode according to claim 1, wherein said valency change ~~redox~~ material comprises a metal oxide/oxide redox couple of a metal selected from tin or manganese.

7. (CURRENTLY AMENDED) The cathode according to claim 1, wherein said valency change ~~redox~~ material comprises a cobalt hydroxide/oxyhydroxide redox couple.

8. (ORIGINAL) The cathode of claim 1, further including a hydrophobic component.

9. (CURRENTLY AMENDED) The cathode of claim 8, wherein said hydrophobic component comprises polytetrafluoroethylene ~~(PTFE)~~.

10. (CURRENTLY AMENDED) The cathode of claim 9, wherein said ~~PTFE~~ polytetrafluoroethylene is at least one of:

- a) intimately mixed with said cathode active material;
- b) graded within said cathode active material; or
- c) a separate layer within said cathode.

11. (ORIGINAL) The cathode of claim 1, further including a current collector extending within said active material.

12. (ORIGINAL) The cathode of claim 11 wherein said current collector comprises an electrically conductive mesh, grid, foam or expanded metal.

13. (ORIGINAL) The cathode of claim 1, further including a

catalytic carbon component.

14. (CURRENTLY AMENDED) A cathode active material for a cathode comprising:

a valency change material ~~adapted to store and supply a cathode fuel~~ for storing and supplying oxygen via a change in valency during use of said cathode.

15. (CANCELED)

16. (CURRENTLY AMENDED) The cathode active material according to claim 14, wherein said valency change ~~redox~~ material is a nickel hydroxide/nickel oxyhydroxide redox couple.

17. (CURRENTLY AMENDED) The cathode active material according to claim 14, wherein said valency change ~~redox~~ material comprises a metal/metal oxide redox couple of an element selected from the group consisting of copper, silver, zinc and cadmium.

18. (CURRENTLY AMENDED) The cathode active material according to claim 14, wherein said valency change ~~redox~~ material comprises a metal oxide/oxide redox couple of a metal selected from tin or manganese.

19. (CURRENTLY AMENDED) The cathode active material according to claim 14, wherein said valency change ~~redox~~ material comprises a cobalt hydroxide/oxyhydroxide redox couple.